IN THE CLAIMS

The following claims listing replaces all prior claims listings:

1 - 4. (Canceled)

5. (Currently amended) A positive electrode active material ~~containing~~ comprising grains, said grains comprising a compound ~~represented by the general~~ of formula $Li_x(Fe_yM_{1-y})PO_4$, wherein:

$0.9 \leq x \leq 1.1$ and $0 < y \leq 1$;

M contains at least one 3d transition metal; and

said grains have a grain size not larger than 10 μm.~~, with M containing a 3d transition metal, wherein, in a spectrum for said $Li_x(Fe_yM_{1-y})PO_4$ obtained by the Moessbauer spectroscopic method, A/B is less than 0.3, where A is the area strength of a spectrum obtained by the Moessbauer spectroscopic method of not less than 0.1 mm/sec and not larger than 0.7 mm/sec and B is the area strength of a spectrum obtained by the Moessbauer spectroscopic method not less than 0.8 mm/sec and not larger than 1.5 mm/sec.~~

6. (Currently amended) The positive electrode active material according to claim 5 wherein said ~~is $Li_x(Fe_yM_{1-y})PO_4$ is $LiFePO_4$.~~ M is one or more of Mn, Co and Ni.

7 - 10. (Canceled)

11. (Currently amended) A non-aqueous electrolyte secondary battery comprising a positive electrode, ~~having a~~ said positive electrode comprising a positive electrode active material, said positive electrode comprising ~~containing~~ grains, said

grains comprising a compound of formula $Li_x(Fe_yM_{1-y})PO_4$, wherein: ~~represented by the general formula $Li_x(Fe_yM_{1-y})PO_4$, where $0.9 \leq x \leq 1.1$ and $0 < y \leq 1$, with M containing a 3d transition metal, a negative electrode having a negative electrode active material, said positive electrode active material and the negative electrode active material being capable of reversibly doping/undoping lithium, and a non-aqueous electrolyte, wherein, in a spectrum for said $Li_x(Fe_yM_{1-y})PO_4$ obtained by the Moessbauer spectroscopic method, A/B, A/B is less than 0.3, where A is the area strength of a spectrum obtained by the Moessbauer spectroscopic method not less than 0.1 mm/sec and not larger than 0.7 mm/sec and B is the area strength of a spectrum obtained by the Moessbauer spectroscopic method not less than 0.8 mm/sec and not larger than 1.5 mm/sec.~~

$0.9 \leq x \leq 1.1$ and $0 < y \leq 1$;

M contains at least one 3d transition metal; and

said grains have a grain size not larger than 10 μm.

12. (Currently amended) The non-aqueous electrolyte secondary battery according to claim 11 wherein said ~~$Li_x(Fe_yM_{1-y})PO_4$ is $LiFePO_4$.~~ M is one or more of Mn, Co and Ni.

13. (Original) A method for producing a positive electrode active material comprising: a mixing step of mixing a starting materials for synthesis of a compound represented by the general formula $Li_xM_yPO_4$, where $0 < x \leq 2$ and $0.8 \leq y \leq 1.2$, with M containing a 3d transition metal; and a sintering step of sintering and reacting said precursor obtained in said mixing step; wherein, in said sintering step, said precursor is sintered at a temperature not lower than 400 °C and not higher than 700 °C.

14. (Original) The method for producing a positive electrode active material according to claim 13 wherein, in said sintering step, said precursor is sintered at a temperature not lower than 400 °C and not higher than 600 °C.

15. (Original) The method for producing a positive electrode active material according to claim 13 wherein said $Li_xM_yPO_4$ is $LiFePO_4$.